ABSTRACT

A computer system programmed to process a large data set includes means for analysing the data set. The means 5 for analysing the data set typically comprises a means for finite element analysis. The computer system also includes means for applying a data compression technique to the analysed data set such that the compressed analysed data set has high fidelity in regions of interest and has lower 10 fidelity in regions of lesser interest. The compression technique comprises the use of a wavelet compression technique. The computer system comprises a high specification server and a local workstation. compressed analysed data set is easily managed by the local 15 workstation to produce different cross-sectional displays without reusing the high capability server. The analysed data set for example comprises a 4D data set of a fan blade containment analysis of a casing.